

**REMARKS**

Claims 1 through 4, 6 through 10, 12 and 14 through 26 are pending in this application, of which claims 8, 10, and 17 through 23 stand withdrawn from consideration pursuant to the provisions of 37 C.F.R. § 1.142(b). Accordingly, claims 1 through 4, 6, 7, 9, 12, 14 through 16 and 23 through 26 are active.

Claims 1, 12 and 25 have been amended and new claim 26 has been added. Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the present amendment should be apparent throughout the originally filed disclosure as, for example, the illustrated embodiments and related discussion thereof in the written description of the specification, noting the second and fourth embodiments, and that the amendment to claim 25 addresses a formalistic issue. Applicants submit that the present amendment does not generate any new matter issue.

**Claims 12 and 25 were rejected under the second paragraph of 35 U.S.C. § 112.**

In the statement of the rejection the Examiner asserted that the language in claim 12 is indefinite as to the position of the optical fiber. The Examiner also identified a perceived antecedent basis issue in claim 25. This rejection is traversed.

In response claims 12 and 25 have been amended to address the asserted bases for indefiniteness. Specifically, claim 12 recites that an optical guide layer is not formed between the active layer and the first conductivity type first and second nitride-based semiconductor layers. Claim 25 now refers to the first undoped optical guide layer consistent with base claim 1.

Applicants submit that one having ordinary skill in the art would have no difficulty understanding the scope of the claimed inventions, particularly when reasonably interpreted in

light of and consistent with the written description of the specification, which is the judicial standard. *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993). Applicants, therefore, submit that the imposed rejection of claims 12 and 25 under the second paragraph of 35 U.S.C. § 112 is not viable and, hence, solicit withdrawal thereof.

**Claims 1 through 4, 6, 7, 9, and 16 through 23 were rejected under 35 U.S.C. § 102 for lack of novelty as evidenced by Hata et al.**

In the statement of rejection the Examiner referred to Fig. 10 in paragraphs [0181-0186], asserting the disclosure of a nitride-based semiconductor light-emitting device corresponding to that claim comprising, *inter alia*, a first nitride-based semiconductor layer 4, active layer 15, first undoped optical guide layer 68, second conductivity type second nitride-based semiconductor layer 67, undoped contact layer 69 and electrode 10. This rejection is traversed.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Dayco Prods., Inc. v. Total Containment, Inc.* 329 F.3d 1358, 66 USPQ2d 1801 (Fed. Cir. 2003); *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002). There is a fundamental difference between the claimed nitride-based semiconductor light-emitting device and that disclosed by Hata et al. that scotches the factual determination that Hata et al. disclose a nitride-based semiconductor light-emitting device identically corresponding to that claimed.

Specifically, in accordance with independent claim 1, the undoped contact layer is formed directly on the second nitride-based semiconductor layer, and the electrode is formed

directly on the undoped contact layer. Not so in the Fig. 10 device disclosed by Hata et al. This is because the identified undoped contact layer 69 which is not formed directly on identified second nitride-based semiconductor layer 67, but is separated therefrom by intermediate first undoped optical guide layer 68.

The above argued structural differences between the claimed nitride-based semiconductor light-emitting device and that disclosed by Hata et al. undermines the factual determination that Hata et al. disclose a nitride-based semiconductor light-emitting device identically corresponding to that claim. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 1 through 4, 6, 7, 9, 16 and 23 under 35 U.S.C. § 102 for lack of novelty as evidenced by Hata et al. is not factually viable and, hence, solicit withdrawal thereof.

**Claims 1 through 4, 6, 7, 12, 14 through 16 and 23 through 25 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Nagahama et al. in view of Tanizawa et al.**

In the statement of rejection the Examiner referred to Fig. 2 of Nagahama et al. asserting the disclosure of a nitride-based semiconductor light-emitting device comprising first conductivity type nitride-based semiconductor layer 14, active layer 16, first undoped optical guide layer 18, second conductivity type second nitride-based semiconductor layer 19, contact layer 20 and electrode 21. The Examiner admitted that Nagahama et al. do not disclose that the contact layer 20 is undoped and has a thickness that is within the scope of the claimed invention. The Examiner, however, concluded that one having ordinary skill in the art would have been motivated to modify the device disclosed by Nagahama et al. by employing an undoped contact

layer having a thickness required by the claims in view of Tanizawa et al., pointing to undoped contact layer 208a appearing in Fig. 5. This rejection is traversed.

There are significant differences between the claimed nitride-based semiconductor light-emitting device and that disclosed by the applied prior art that undermine the obviousness conclusion under 35 U.S.C. § 103. In this respect Applicants would note that in paragraphs [0199] and [0202] of Tanizawa et al. it is disclosed that the undoped contact layer 208a is formed on a p-type layer 208b having a thickness of not greater than 100 Å (0.01 μm). Clearly, such a structure is different from that disclosed in independent claim 1. Specifically, independent claim 1 requires the second nitride-based semiconductor layer to have a thickness of at least 0.1 μm.

Based upon the foregoing it should be apparent that even if the applied references are combined as proposed by the Examiner, and Applicants do not agree that the requisite fact-based motivation has been established, the claimed invention would not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). Applicants, therefore, submit that the imposed rejection of claims 1 through 4, 6, 7, 12, 14 through 16 and 23 through 25 under 35 U.S.C. § 103 for obviousness under predicated upon Nagahama et al. in view of Tanizawa et al. is not factually or legally viable and, hence, solicit withdrawal thereof.

#### **New Claim 26**

New claim 26 is free of the applied prior art for reasons which should be apparent from the arguments advanced in traversing the imposed prior art rejections. Specifically, Hata et al. neither disclose nor suggest forming an undoped contact layer directly on the second nitride-based semiconductor layer, while Tanizawa et al. neither disclose nor suggest forming an

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undoped contact layer on a second conductivity type second nitride-based semiconductor layer having a thickness of at least 0.1  $\mu\text{m}$ .

Based upon the foregoing it should be apparent that the imposed rejections have been overcome and that all active claims are in condition for immediate allowance. Favorable consideration is, therefore, solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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